TOWARD A TAXONOMY OF THE ADMISSIONS DECISION-MAKING PROCESS

THE COLLEGE BOARD

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Toward a Taxonomy of the Admissions Decision-Making Process:

A Public Document Based on the First and Second College Board Conferences on Admissions Models

The College Board

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FOREWORD

This taxonomy of the admissions decision-making process evolved during meetings convened by the College Board in Toronto in August 1998 and in Vancouver in January 1999. Special thanks go to Jack Blackburn, director of Admissions, University of Virginia, for serving as chair of both meetings.

Both conferences were informal and highly participatory. A review of the list of participants (see page 30) reveals a roster of seasoned college admissions professionals from across the country. Collectively, they represent some of the most "highly selective" institutions in the United States; but more important, they represent more than a century of hands-on experience in the field. If any group of individuals knows how admissions is done, this is one such group.

But there are many other very experienced admissions professionals and many different types of institutions. The conference participants urged that the initial draft of this taxonomy be shared with other professionals for critique and commentary, and so this document was distributed to College Board higher education Guidance and Admission Assembly representatives. Their comments and suggestions have been incorporated into this final report, although "final" may not be so absolute. We keep an open invitation for College Board representatives to expand the dialogue on the evolving state of admissions in the United States.

Gretchen W. Rigol
Vice President

INTRODUCTION

In August of 1998, a group of about 50 admissions deans, directors, and researchers from the United States gathered in Toronto at the invitation of the College Board. The participants represented a broad cross section of private and public colleges and universities. The goal of the symposium was to begin a dialogue on the future of admissions, and to consider how the profession needs to change to meet social, political, and economic challenges of the twenty-first century. The symposium participants debated a wide range of issues and concerns. While little consensus was reached on the future of admissions, most participants recognized that there is a need to better inform the public about how and why admissions decisions are made. Families and political leaders alike view the effects of being admitted to one institution, or being denied at another, as having significant and long-term consequences. To provide an initial structure for subsequent meetings, the College Board commissioned an effort to describe the various types of decision-making models used in college admissions. One result of that effort is the present paper, which attempts to organize the various approaches to admissions decision making in two ways: to preserve the underlying complexity of admissions as a profession, and to present a framework clear enough to promote future discussion. A subsequent meeting has since been held in Vancouver in January of 1999, during which the core ideas presented here were refined and elaborated.

The Toronto conference began with a discussion of Thresher's seminal monograph, "College Admissions and the Public Interest" (1966, 1989). It was immediately clear that never before has "the great sorting" described by Thresher been under such close public scrutiny. For the most part, Thresher's insights are as valid now as they were in 1966. However, profound changes have occurred in the intervening 30 years. The cost of higher education in real terms has risen dramatically. The affirmative action movement of the "Great Society" has made its mark. There is a growing segment of the public that believes this movement has outlived its usefulness. Access to higher education, once viewed as a privilege, has now come to be seen as an inalienable right. The racial and demographic composition of the United States is changing and will continue to change for several decades, particularly among younger college-age citizens. For example, the percentage of the United States population under 25 who are black is projected to rise only slightly by the year 2015 (from 14.5 to 15.2 percent), but the percentage who are Mexican Americans will rise from 7.9 to 11 percent, and non-Mexican American Hispanics will more than double from 4.0 to 9.9 percent of the population.[1] In contrast, the percentage of white students under the age of 25 will drop from 70.4 to 57.8 percent over the same period. Even more striking, among children from low-income families, the percentage who are ethnic "minorities" will grow from 49.4 to 65.2 percent.[2] The college-age population is becoming less affluent and more diverse.

These shifting demographics add to a growing pressure on the admissions profession to change and adapt. These pressures originate both within education and from outside political and social forces. We have begun to see clear evidence of multiple conflicting pressures. Consider some examples of conflicting trends. On the one hand, many colleges are actively recruiting students from underrepresented ethnic backgrounds. On the other hand, legislative policies have been enacted in some states that preclude the consideration of ethnicity in the admissions process. On the one hand, several of the nation's better-endowed universities are diverting funds into financial aid in an attempt to make higher education more affordable. On the other hand, an equal number of less affluent institutions are publicly acknowledging that a student's ability to pay is a consideration in the selection process. On the one hand, colleges are promoting the benefits of an overall residential experience on their campus, in part as a justification of increasing costs. On the other hand, more and more colleges are exploring the Internet and "distance-learning" as means of providing wider and more cost-efficient access to higher education.

It is clear that higher education is in a transitional phase. More important for admissions professionals, the process by which potential students are recruited and selected for admission is likewise in a state of transition. This transition creates a host of new issues for the professional and is a growing source of confusion and controversy among those concerned with the outcome of the admissions process. Thresher's essay was mostly concerned with the philosophical underpinnings, the "why," which has guided the emergence of admissions as a profession. However, along with increased public awareness and scrutiny, there is a much greater concern for the "who" and the "how" of admissions. Who decides what educational opportunities are made available to a prospective student? How is this decision made? We will defer discussion of "the who" of the admissions decision-making process for another time. The Toronto and Vancouver conferences were organized primarily to begin a dialogue among admissions professionals on "the how" of the selection process. This question is the focus of our attention in the current paper.

There is an old saying that goes something like this: "baseball is a simple game; you throw the ball, you hit the ball, and you catch the ball." The same might be said of the decision-making process in admissions. It really is very simple: you either admit every prospective student who is qualified, or if you have an excess of qualified applicants, you select "the most desirable applicants" from the qualified pool for admittance. The devil, it seems, is in the details. First, what does it mean to be "eligible" for admissions? Does "eligibility" guarantee admittance, or simply narrow the field for a subsequent process of competitive selection? When, as in most cases, selection is necessary from among a pool of students, all of whom are qualified or eligible, what is the basis for this selection? What makes one prospective student "better" or "more attractive" or "more desirable" to an institution than another? Who ultimately deter-

mines the criteria by which decisions are made, and who makes the decision regarding individuals? What information is gathered during the selection process, and how is it actually used? What trade-offs exist between competing priorities and potential selection criteria? Finally, how do we ensure that our selection criteria and decision-making process will stand the test of public scrutiny and debate?

Although no consensus was reached on any of the above questions at the meetings, it was clear that the range of potential answers encompassed some general themes. In this paper, we will attempt to organize and elucidate the broad range of ideas discussed at the Toronto and Vancouver conferences. Our purpose is not to provide any definitive answers. Instead, we hope to clarify the different evaluation processes that currently occur, albeit implicitly, within admissions offices as potential students are evaluated for admission. More and more, the admissions profession is being called on not only to describe, but also to defend its practices. "Trust us, we know what we are doing" is no longer a sufficient response. As a profession we must be prepared to demonstrate that our decision-making process does indeed promote outcomes that have been designated as priorities.

A PRELIMINARY TAXONOMY OF ADMISSIONS

The framework presented in this paper might best be viewed as a taxonomy of admissions decision-making models—a basis for more clearly understanding the different approaches and challenges implicit in applicant selection. As such, our purpose is to describe qualitatively different decision-making models, not to suggest what approach is "best." Indeed, as we will see, the "best practice model" for making admissions decisions can only be derived after a careful review of the mission of a particular institution, and only after considering an institution's constraints and available resources. Furthermore, a majority of institutions employ several different decision-making models, either simultaneously or sequentially. What at first glance appears to be a simple process is in reality a very complex process, each institution representing a unique compromise between competing values and priorities.

The most basic distinction in the admission decision-making process is the one between eligibility and selection. Pure eligibility-based admissions models are ones in which there are objective and public criteria that anyone can use to determine if a student will be admitted to the institution. All students deemed "eligible" by these criteria will be admitted; all students who fail to meet the eligibility criteria will be denied. There is no ambiguity in an eligibility-based model, and there is little in the way of a selection process *per se*. It is important to realize that we are not using the terms "selection," "selective," or "nonselective" here in the same way that they are often used when describing so-called "selective institutions." In this latter sense, selective is used to refer to

the outcome of the admissions process—most often as a modifier that implies some high level of academic quality in the student body or difficulty in gaining admissions. Rather, we will use the term selective here to refer to the decision-making process itself. For our purposes, eligibility-based models are ones in which prospective students are evaluated with respect to some published standard. Selective models are those in which prospective students are evaluated with respect to each other. It is quite possible for an eligibility-based selection process to result in a "selective" student body of high academic quality.

Eligibility-based models are among the simplest admissions models and require the least personal intervention by admissions personnel. However, even these simple models have the burden of proving the efficacy of their criteria for admissions. Furthermore, for many institutions, primarily publicly funded systems, eligibility criteria may exist and even be published, but meeting the criteria does not guarantee admissions. Rather, meeting those criteria only guarantees that an applicant will be considered for admission in a subsequent competitive phase of the process. These types of models are not truly eligibility-based, but rather are competitive (or selective). In practice, virtually every admissions office that employs some type of selective process will also have minimum eligibility criteria, whether implicitly or explicitly, below which applicants do not receive full competitive consideration. The primary distinction in how eligibility functions in a selective environment is the degree to which the eligibility criteria are public and absolute versus subjective, spanning a range of values within which an applicant may or may not be competitively considered.

In the majority of instances, applicants who meet minimum eligibility guidelines are not guaranteed admittance. Instead, the pool of eligible students is subjected to a subsequent competitive evaluation process. The term "selective institution" tends to evoke a particular image of a highly competitive institution where admittance requires stellar academic qualifications. However, in reality any institution that denies eligible applicants is, by definition, employing some form of selective decision making. In other words, a process must be put in place to determine who among the larger group of eligible applicants will, in the end, be offered a place in the class and, more significant, who will be denied a place. If we exclude the community college system, this definition of selective applies to the vast majority of colleges and universities. Even within many community colleges, matriculation in certain popular fields may be highly competitive, hence, for our purposes, the result of a selective process.

What then distinguishes the various decision-making models in admission? Discussion among the participants in Toronto and Vancouver suggested that four essential factors are sufficient to determine the qualitative nature of a selective admission model implemented at a particular institution. The first factor is an institution's philosophical perspective regarding the social goals it serves within higher education. In other words, what is the role of that college or university in society? The second factor is the nature of the information con-

sidered in the selection process; that is, the attributes defined by the institution that constitute a desirable applicant. The third factor is the emphasis placed on each type of information considered in the decision. The fourth factor is how these desired attributes are measured, evaluated, and validated.

Philosophical Basis of Admission

Despite what the popular press and various guidebooks would suggest, gaining admissions to college is not equivalent to finding your place on the food chain. If one must use a biological metaphor, a more appropriate analogy would be finding your niche in an ecosystem. Different institutions aspire to serve different educational needs, and different students will have their educational needs served best by different types of colleges. A particular institution's decision of whom and how to admit—its admission model if you will—must be related to the societal role that it elects to play. Often the interpretation of this role, however vaguely stated, is found in the mission statement required by the institution's accreditation agency. The founders and trustees of colleges and universities are free to define their societal role in different ways. For example, a land grant institution has a different role to play than does a conservatory of music, and the mission of a community college differs from that of an Ivy League college or a flagship public university. The range of missions, and their associated philosophical perspectives on who should be admitted, is broad but not infinite.

A total of nine such general perspectives or "philosophical models" were identified in discussions held at the Toronto and Vancouver Conferences. Two of these perspectives are "nonselective" in that judgments are made not with respect to other applicants, but with respect to objective criteria. In this sense they are the philosophical precursors to the pure eligibility-based models of admission. The two nonselective perspectives are:

Entitlement

- *Higher education is an inalienable right and should be made available to everyone.*

Open Access

- *College is a natural progression after high school and should be made available to everyone who is qualified.*

The remaining seven perspectives can be thought of as precursors to "selective" admissions models, in that students are compared to each other on some set of criteria, and a decision is made to admit some while denying admissions to others. The seven selective perspectives can also be subgrouped along three dimensions: the capacity of the prospective student to perform in college; the capacity of the prospective student to benefit from the collegiate experience; and the potential for the student to make external contributions.

First, there are two perspectives that strive to recognize a prospective student's capacity to perform in the college environment based on demonstrated performance prior to college. These perspectives are related to prospective students' internal qualities apart from environmental influences and conceptualize access to higher education as a reward for past performance. The two "capacity to perform" perspectives are:

Meritocracy

- *Access to higher education is a reward for those who have been most academically successful.*

Character

- *Access to higher education is a reward for personal virtue, dedication, perseverance, community service, and hard work.*

The next two perspectives are more related to how higher education affects the prospective student. These perspectives place the highest value on what the student gets out of college; as such they can be described as conceptualizing higher education as a means to bring the most benefit to those selected for admission. The two "capacity to benefit" perspectives are:

Enhancement

- *The goal of higher education is to seek out and nurture talent.*

Mobilization

- *Higher education is the "great equalizer" and must promote social and economic mobility.*

Finally, there are three models that are most concerned with the effect that potential students will have on entities external to the student, primarily the college itself or society in general. These perspectives tend to view student selection as a means for achieving a more general goal. Access to higher education is granted based on the likelihood that the student will make a significant contribution either during college or later on. The three "potential-to-contribute" perspectives are:

Investment

- *Access to higher education should promote the greater good and further the development of society.*

Environmental/Institutional

- *The admissions selection process is designed to meet the enrollment goals and unique organizational needs of the admitting institution while promoting the overall quality of students' educational experience.*

Fiduciary

- *Higher education is a business, and access must first preserve the institution's fiscal integrity.*

These nine philosophical approaches to admission, along with their associated selection criteria described later in this paper, are the basis of our proposed taxonomy of the admissions decision-making process. However, the nine perspectives outlined above are not intended to be an exhaustive list of all the possible bases for making decisions about who should be granted access to higher education. Indeed, a thorough discussion of philosophical perspectives that underlie the admissions process would require a substantial paper in and of itself, and that is not our purpose here. Rather, we propose that these nine perspectives be explored for their value in elucidating the selection criteria to follow. Each of these perspectives suggests an attribute on which prospective students may be evaluated or compared. These selection criteria, in turn, suggest relatively well-defined models of admission.

The pure form of any given model does not actually describe any real college or university. Rather, the prototypic models can be thought of as representing a family of related selection models that have utility for classifying actual colleges and universities. Further, within each family, a range of alternatives exists concerning how the various selection criteria might be weighted and what secondary attributes of the applicant should also be considered. However, all members of a given family have a single defining characteristic, a primary selection criterion, which derives from its philosophical roots. With the exception of eligibility-based models, most admissions offices employ more than one model in their selection process, perhaps during different stages of the admitting cycle, or for different segments of the applicant pool, or as a means of weighting multiple factors in a single decision process. However, such complexities can be thought of as being "built up" from simpler decision-making processes, which in turn are derived from one of the basic admissions philosophical perspectives.

The individual institution's needs, priorities, and goals, as well as the particular constraints under which each institution functions, will ultimately determine how these different approaches to student selection are integrated into a functioning selection process. What is important for our purposes, and what was clearly expressed at the Toronto Conference, is that each perspective represents a valid approach to student selection. Despite personal opinions on what the basis for student selection *should* be, and aside from the practices and traditions at any particular institution, each of the perspectives has proponents, and in some form or another each is an integral part of student selection at certain institutions. Further, the criteria by which applicants are actually evaluated are based on the perspectives represented by these prototypic models of admissions. These selection criteria have profound implications for the great sorting described by Thresher.

Eligibility and Selection

Throughout this paper, a fundamental distinction is drawn between eligibility and selection. Two of the prototypic admissions perspectives described above, entitlement and open access, are based purely on an eligibility approach. Students admitted under these models are evaluated against a uniform standard, rather than competitively with each other. Eligibility-based admission processes are driven exclusively by public and objective criteria; they carry no ambiguity in terms of the outcome for a particular student. If a prospective student meets the eligibility requirements he or she is guaranteed access to the next stage, which in some cases is enrollment and registration. Virtually every institution of higher education has some array of eligibility requirements. However, in most cases, meeting these requirements does not guarantee admission. Rather, eligibility is a preliminary step to a selective admission process during which the prospective student is qualitatively evaluated on additional criteria and in competition with other prospective students. In such cases, it is the outcome of this competitive selection process that determines whether or not a particular student will be admitted.

The exception to selection by competition is in so-called open admissions institutions where the eligibility requirements alone determine the admission decision. In practice, there are two slightly different implementations of a pure eligibility-based admissions model. The "entitlement" model is used to admit students, often on a rolling basis, who meet very minimal requirements and does not include a requirement to submit standardized test scores. The selection criteria for entitlement models are based on progression measures. Has the student successfully completed a well-defined set of preliminary experiences? Often, the only eligibility requirement in an entitlement model is a high school diploma or GED. Alternatively, the progression criteria may be met through work or life experiences rather than through formal experience. Admissions models based purely on progression are typically found at publicly funded two-year colleges and are the hallmark of the community college system in several states. The distinguishing factor of progression models is that they do not require the applicant to demonstrate a quantitative level of performance, but only to have successfully passed some hurdle. In addition, progression models typically do not rely upon objective, nationally based, academic requirements to establish eligibility.

A second level, or implementation, of pure eligibility models is the "open access" models. The selection criteria for open access models are based on performance measures. Has the applicant demonstrated competency at some predetermined level of (academic) performance? In an open access model, published criteria still directly determine a prospective student's admis-

sibility, without resorting to subjective evaluations. However, the eligibility criteria include more stringent academic requirements, including performance minimums on nationally based standardized tests and high school grade performance. In many open access models, standardized tests and high school performance are traded off against one another so that admissibility is guaranteed based on a table that considers both. For example, one large state university guarantees admissions to all students who meet the following criteria:

- A Core High School GPA of 3.2 or better, OR
- A 2.5 High School GPA AND an ACT™ of 16 or an SAT® of 750, OR
- A 2.0 High School GPA AND an ACT of 18 or an SAT of 840

Open access models typically follow a traditional admission cycle where students have set deadlines for submitting applications and enrolling in classes.

We will devote relatively little discussion to pure eligibility models. Their inherent lack of ambiguity makes eligibility models much less controversial with the public. The primary focus of discussion concerning eligibility-based models is the nature, values, and trade-offs of the progression and performance criteria used to establish eligibility. Given a certain high school GPA, what test score should be required for admission? This is essentially a question of capacity and predictive validity. Eligibility criteria, at least in open access models, may serve to limit the numbers of eligible students and may be varied to ensure that the number of eligible students does not exceed the institution's capacity. In addition, the academic standards of the performance criteria may be varied to ensure a reasonable probability of academic success among those students deemed eligible.

The research underlying eligibility-based models is particularly critical for two reasons: First, research serves to guide institutions with an open admissions models. Second, most selective admissions processes depend on performance criteria to prescreen candidates for later competitive evaluation. In this respect, most select admissions processes begin with a preliminary eligibility stage. The eligibility-then-selection approach is perhaps best exemplified by the University of California System. Eligibility for admissions to the University of California (UC) System is based on guidelines set forth in the California Master Plan for Higher Education. The Master Plan requires that the top one-eighth of the state's high school graduates be eligible for admission. This has been translated into a formula involving a set of requirements in high school and performance on standardized test. Eligibility is determined by a combination of high school performance and standardized test score performance. However, meeting the eligibility requirements does not guarantee admission to any particular campus in the UC system. Instead, each campus competitively reviews each eligible applicant that has applied to that campus. The competitive selection process goes well beyond the eligibility criteria and is based, in part, on campus-driven goals, needs, and capacity.

According to published material, 50 to 75 percent of the admitted freshmen at each University of California campus are selected on the basis of several academically oriented factors. These factors include high school grades and test scores, but also include the nature of the high school curriculum, the academic performance of the individual relative to the available educational opportunities, outstanding performance in specific areas or projects, and a record of academic improvement in the last two years of high school. The remaining 25 to 50 percent of the admitted freshman are selected on the basis of additional criteria that are not strictly academic in nature. These factors are "designed to further assess an applicant's academic potential and promise, as well as potential to contribute to the educational environment and intellectual vitality of the campus."[3] The factors considered as part of the University of California System's alternative review include a broad range of special talents, achievements, and life experiences, but may also include geographical factors such as the location of the applicant's high school.

Selection Criteria

The competitive selection process for the University of California System is described here at some length because it provides a good overview of how complex the competitive admissions process can truly be. The wide array of factors that may be considered in competitive selection is at first daunting, even to admissions professionals. A major goal of the Admissions Models Conferences was to further clarify the major underlying dimensions of selection and to take the first steps toward developing a coherent overview of the current models used to select students. Seven of the prototypic perspectives on admissions previously described imply a primary competitive criterion to be used in the selection process. The seven selective models, along with the two models that are purely eligibility-based, form the nine distinct decision-making families listed in the Appendix.

The evaluative criteria associated with the three philosophical groups and seven perspectives are:

A. Capacity to Perform
   1. Academic Quality
   2. Personal Qualities

B. Effect of Education on the Individual
   3. Potential to Benefit
   4. Overcoming Educational Adversity

C. Potential to Contribute
   5. Potential to Contribute
   6. Student Body Needs
   7. Ability to Pay

Academic Quality

Academic quality is the selection criterion associated with the "meritocracy" perspective and refers to an applicant's intellectual accomplishments, both in classroom pursuits and in related areas. Academic quality will be dealt with quite briefly here, as it is the most commonly used selection criteria and the most familiar to both admissions professionals and the general public.

Academic quality is typically evaluated by considering an applicant's performance in three areas. The first measure is the student's actual performance in high school. A thorough evaluation of high school performance will often go beyond a student's simple high school GPA. In addition, it is important to consider the nature of the courses a student took, and the trajectory of his or her grades throughout high school. Did the student's performance improve during the junior and senior years? Did the student do very well as a freshman but less well as he or she progressed through high school? Did he or she take difficult college preparatory classes, or Advanced Placement (AP®) classes? What is the prospective student's class standing? Do the student's grades surpass the grades of other students in her class, or "does everyone at that high school earn A's"? This last topic has become increasingly important to assess because of the high school grade inflation over the past decade.

The need to compare students' performance across different curricula and grading standards led to the original development of national standardized tests such as the SAT. Standardized tests remain the best means to compare the academic abilities of students from different situations. The tests are a primary consideration in evaluating academic quality. Moreover, subject-area test performance is an important tool for evaluating students' strengths and weaknesses and for validating course grades.

The third area of consideration when evaluating academic quality is evidence of the student's accomplishments beyond grades and test scores. This can include academic honors, special projects or research, and a demonstrated history of intellectual curiosity and pursuits outside of the classroom.

Personal Qualities

Personal qualities are the selection criteria associated with the "character" perspective on admissions. Applicants' academic accomplishments prior to college are certainly a major, if not the major, consideration in most admissions selection process. However, many of the participants at the Toronto Conference argued that we must look beyond pure academic potential when evaluating applicants.

There is general agreement that only students who have the potential to succeed academically should be considered for admission. But what additional attributes might guide our decision-making process when we are faced with need to admit some applicants, but deny admissions to others? This is particularly problematic when the pool of applicants contains a large number of indi-

viduals who are capable of succeeding academically, all of whom are eager and at least minimally qualified for admission. While many "nonacademic" factors were identified in Toronto, one set of selection criteria, namely personal qualities, was unanimously acknowledged as being appropriate to consider. Indeed, for some types of institutions, such as the service academies, the role of personal qualities in applicant selection was judged to be as important as academic capabilities—once it is established that the applicant can successfully compete in the classroom. Applicants who ultimately gain admittance to the service academies must demonstrate excellence in both academic ability and personal character.

Many of the selection criteria discussed in subsequent sections can be roughly construed as "personal qualities." Therefore, it is necessary to differentiate the meaning of the term personal qualities, as it is used here, from the vast set of everything we know, or can know, about a student. Throughout this section we will refer to the groundbreaking work of Warren Willingham and his colleagues (1985) to assist us in describing the role of personal qualities in admission. Willingham based his definition of personal qualities on the factors that could be discerned from the prospective student's accumulated record while in high school. In order to assess the importance of such personal qualities, he identified several quantitative measures that best represented students' collegiate success in three general categories: scholarship, leadership, and significant accomplishments. We will focus here on attributes related to leadership and significant accomplishments because scholarship success more appropriately falls under the previous section dealing with academic quality. In addition, we limit our definition of personal qualities to a prospective student's precollegiate qualifications relevant to leadership and significant accomplishments, as demonstrated and measured by his or her accumulated record.

Even with these limitations, personal qualities include a broad range of applicant attributes. Willingham studied many examples of such qualities, including community activities, athletic and creative accomplishments, the attainment of leadership positions, work experience, and various measures derived from applicants' personal statements and high school references. Besides the efficacy of these measures to predict leadership and accomplishment success in college, and beyond the general desirability of those characteristics, Willingham also demonstrated that several of his constructs contribute to our ability to predict academic success above and beyond what is possible using purely academic measures.

For example, Willingham found that the construct of "follow through" had a particularly strong relationship to subsequent academic performance. Follow through was defined as a continuous commitment to success in one or more areas. While such commitment could be to classroom-related activities, it could also be to a club, activity, or hobby. But in any of these cases, the student must have demonstrated a long-term involvement and a high level of achievement.

A second quality that Willingham identified as being predictive of later academic performance was the applicant's personal statement. Students who have insight into themselves and are able to communicate this to others in a creative way tend to do better in college. Some students come off as being very one-dimensional with little in the way of interests or curiosity. These students tend to perform less well in college than might be expected from their high school grades and test scores. They also tend to have more difficulty managing the transition to college.

Finally, Willingham found that the value of a complete and well-written reference letter should not be underestimated. Students who have made enough of an impression on a high school counselor or teacher to get more than the standard bland reference often make a similarly positive impression in college. On the other hand, a poorly written reference should not necessarily be held against a student, but a well-written one can certainly add to the overall picture of how a particular student may contribute to life on campus.

Willingham's work, while being a substantial contribution to understanding the role of personal qualities and selection, was not intended as an exhaustive review of all possible personal qualities. Several additional attributes were discussed during the Toronto Conference. Many of these have yet to be operationalized to the same extent as Willingham's attributes and are in need of more refinement. For example, moral and ethical character was mentioned in Toronto as being worthy of consideration, as were compassion, empathy, and social consciousness. These attributes may be more difficult to define and measure than "leadership," but they certainly describe characteristics that might reasonably influence the selection process.

Potential to Benefit

The "enhancement" perspective suggests that we must look beyond what a potential applicant has achieved, and consider what that student might achieve academically if granted access to a particular institution. What is his or her potential to benefit from the opportunity offered by a particular college or university? In many ways, higher education institutionalizes the old adage that "the rich get richer and the poor get poorer." The majority of students are selected for college based on their prior academic accomplishments. These students have already benefited greatly from the educational experiences available to them from preschool through high school. Likewise, modern standardized tests tend to be better at measuring what students have learned than what they are capable of learning. Thresher (1966, 1989) and others[4] have argued that colleges must do more to measure the "value added" of higher education. Most would agree that the quality of an educational system is related to the educational progress made by the students who attend. Certainly, this is an important evaluation benchmark for most precollegiate public school systems. However, in higher education we tend to base our self-estimates of institutional

quality more on the academic quality of the new students we successfully enroll. On the other hand, we seldom discuss—much less attempt to measure—how far our students progress once they are in our intellectual care.

True, there is a growing trend toward examining institutional efficacy in a cost-benefit context. However, much of this discussion is directed at finding the "best buy," and the various guidebooks and surveys that address the value-added issue tend to do so from a financial perspective, not the least of which is their own sales volume. However, value-added has another, more intellectual, interpretation: namely, the degree to which the knowledge base, cognitive skills, and problem-solving abilities of our students grow and develop during their college years. It has been suggested by some,5 for example, that all graduating students should be required to take a national standardized test (such as the GRE) as a means of evaluating the progress that has been made during their collegiate years. Graduates' performance on such an "exit" test might be compared to the same students' performance on entry measures (such as the SAT) as a means of establishing intellectual value-added. Aside from the feasibility of those suggestions, such a shift in institutional self-evaluation would have major implications for how we select students for admission. The ability for a prospective student to grow intellectually, rather than a static assessment of what the applicant has already attained, would quickly become a significant component of applicant evaluation.

Statistically, it may seem that selection based on a person's ability to benefit is the diametric opposite of selection based on the highest precollegiate academic attainment. One might assume that the applicants who are likely to benefit the most are those who have the farthest to go in terms of educational attainment. In practice, identifying prospective students with the greatest ability to benefit is more complicated. One must also take into account the unique demands and opportunities presented by the selecting institution. Not all students may be able to benefit from a Harvard (or Princeton, or Yale) education, or an Oberlin or Juilliard education, or the experience offered by one of the service academies. The ability to benefit requires that a student have the skills to participate in a meaningful way in the educational process of the institution. It requires that a certain level of cognitive abilities already be developed, or artistic or physical talent be present. The prospective student must be able to interact successfully in the institution's learning environment and be able rise to the level of peer competition. On the other hand, the students who have the most to gain from the educational experience that a particular institution has to offer are not necessarily those with highest SAT scores or the best high school record.

Overcoming Educational Adversity

The "mobilization" perspective is a second dimension that is also related to the effect of higher education on the student. The mobilization perspective suggests that we should consider what a student has had to overcome in order to

qualify for a competitive selection process. Not all students have had the same educational opportunities. For some students, even surpassing the basic eligibility hurdle in order to be considered for admission at a selective institution represents a major achievement.

Consider two applicants. Student A was born into an affluent family. He had two attentive and loving parents who provided everything that a child could need in terms of support and resources for both his physical and intellectual development. He had his own computer by the time he started preschool. He was learning to read by the age of five, and was brought up watching the Discovery Channel and visiting museums. He attended the best private grade school and private high school in the city, where he had access to the best learning materials and a safe supportive learning environment. When he was ready to apply for college, he took two separate review classes to prepare for his SAT Exams and earned a score of 1310. Student B, on the other hand, was raised by a single mother in a low-income housing project. He had four brothers and sisters and seldom received any individual attention. He spent most of the day as a child watching cartoons on TV. He did not attend preschool. The grade school he attended was in terrible physical condition and was under a court order to be replaced within three years. The average class size in his grade school was over 50, and he did not functionally learn to read until the third grade. The public high school he attended was generally acknowledged to be one of the worst in the city. The school had almost as many security guards as teachers. During his senior year, there were 25 assaults and 2 shootings on school grounds, 1 of which he witnessed. His school did not give the PSAT/NMSQT, and he managed to register for and take his SAT exams without either his mother's or guidance counselor's knowledge. He earned a 1090 on his SAT. How would this information be incorporated into the admissions decision at your institution?

The academic credentials amassed by a potential student are certainly an important consideration in the selection process, but credentials alone, taken out of context, are static measures of what someone has accomplished. An important theme at the both the Toronto and Vancouver Conferences was the need for more dynamic assessments of an applicant's preparation for college. The path that a student took in preparing herself for college may be as important as the absolute level of preparation that she has attained. Bok and Bowen address the contextual issues quite clearly in *The Shape of the River (1998):*

> *To begin with, it is not clear that students who receive higher grades and test scores have necessarily worked harder in school. Grades and test scores are a reflection not only of effort but of intelligence, which in turn derives from a number of factors, such as inherited ability, family circumstances, and early upbringing, that have nothing to do with how many hours stu-*

> *dents have labored over their homework. Test scores may also be affected by the quality of teaching that applicants received or even by knowing the best strategies for taking standardized tests, as coaching schools regularly remind students and their parents. For these reasons, it is quite likely that many applicants with good but not outstanding scores and B+ averages in high school will have worked more diligently than many other applicants with superior academic records.*[6]

Contrary to the perception of some in the general public, employing an applicant's ability to overcome educational obstacles as a selection criterion is not simply a means to correct past inequities. Rather, these characteristics are also predictive of future success, both in the classroom and in life itself. Students who demonstrate the ability to rise above their early lives' social and economic limitations are likely to face future hurdles with the same determination and perseverance. They tend to be self-motivated and more mature than peers who had an easier path. They are better equipped to manage the freedom of being on their own at college and to negotiate the developmental transition between high school and college. Their peers may have better academic credentials, but may also have been more sheltered.

A good example of how "overcoming educational adversity" as a selection criterion can complement more traditional selection processes is the Posse Program sponsored by the Posse Foundation. Posse participants are selected from high school students in urban environments who have demonstrated an exceptional ability to overcome their environmental obstacles and emerge as qualified students and promising leaders. Posse members enter the sponsoring institutions, such as Vanderbilt, Lehigh, Rice, and DePauw, as a cohort of about 10 students each year. The Posse Program selects students very likely to be overlooked by traditional credential-based admission processes. The program has been in place for over a decade now, and the results demonstrate that alternative admissions selection criteria can produce very successful college students. Posse members have held an extraordinary number of leadership positions at their home institutions, including student body president, club officers, and homecoming queen. They have been very involved in the surrounding communities and have helped to bridge the local town/gown chasm. More importantly, 85 percent of the Posse participants are in good academic standing, and their graduation rates are comparable to that of the larger student body at their sponsoring institutions. These successes are even more notable in light of the fact that these students would have had virtually no chance of being admitted to the universities that they actually attended if they had been judged solely on their academic credentials.

Potential to Contribute

The criteria described thus far stem from perspectives that seek to recognize the abilities of prospective students and the benefits that they may derive from

access to higher education. These perspectives highlight the student as the recipient of what higher education has to offer. However, a third set of perspectives exists. These perspectives are based not on the benefits to the student directly, but rather on the benefits to external entities that may evolve from granting access to particular applicants. The "investment" perspective views access to higher education as a means ultimately to benefit society as a whole. As such, it suggests selection criteria that attempt to ascertain the potential return to society that would be realized from the competitive selection process.

Do colleges and universities have a responsibility to seek out prospective students who will not only benefit personally from a postsecondary education, but also will make significant contributions back to their communities? Bok and Bowen (1998) argue vigorously for such a responsibility:

> *Virtually all colleges and universities seek to educate students who seem likely to become leaders and contributing members of society. Identifying such students is another essential aspect of admitting on the merits… There is widespread agreement that our country continues to need the help of its colleges and universities in building a society in which access to positions of leadership and responsibility is less limited by an individual's race than it is today.*[7]

Although Bok and Bowen are primarily concerned with the effects of affirmative action, their statements apply equally well to any student, regardless of race, who may be judged as having a greater potential to contribute to society at large than do peers with slightly better, but purely academic, credentials.

During discussion periods at the Toronto Conference, it was widely acknowledged that the potential to contribute often goes beyond standard measures of intelligence and academic accomplishment. Advances in our understanding of what skills and abilities are required to be successful in life support this claim. For example, Sternberg (1985) has argued for a broader view of intelligence. He suggests that a well-developed theory of intelligence includes three components: analytic intelligence, creative intelligence, and practical intelligence. Analytical intelligence most closely corresponds to what we typically mean by the word intelligence in an academic context. Further, it is the sort of intelligence that is almost exclusively measured by our current assessments, including standardized test scores and classroom grades. However, it is Sternberg's other two types of intelligence (assuming a baseline of academic ability) that are most predictive of a person's likelihood to have a significant and lasting impact on society. Sternberg's creative intelligence refers to the ability to go beyond the given to generate new and interesting ideas, and his practical intelligence refers to the ability to translate theory into practice and abstract ideas into practical accomplishments. Indicators of these different forms of intelligence are often neglected in the traditional selection process. However, it is these skills that are most likely to identify applicants whose success beyond college will have the greatest impact on society.

The consensus at the Toronto Conference was that finding and nurturing individuals likely to make a "high return on our educational investment" and have a positive impact on our communities is a fundamental responsibility of higher education. Bok and Bowen (1998) also offer persuasive arguments:

> *The third principal consideration is to attract students who seem especially likely to utilize their education to make valuable or distinctive contributions to their profession and to the welfare of society. Colleges and universities receive an exemption from taxation because they serve a social purpose. Educational institutions have long made deliberate efforts to attract and educate students capable of making a difference and contributing something special to society. Before the turn of the century, Jane Stanford declared that the "chief object" of the new university she had helped to found was "the instruction of students with a view to producing leaders in every field of science and industry." Today, almost every selective college and professional school makes a similar claim.*[8]

Certainly, more needs be done to develop assessment tools that enable colleges effectively and reliably to use a student's "potential to contribute" as a criterion in the selection process. However, Bok and Bowen demonstrate empirically that students who were admitted to the selective schools in their study under "affirmative action" guidelines are more likely to make greater contributions to their communities than students admitted on the basis of traditional academic measures. They argue that the contributions these students make, both in terms of public service as well as leadership in their chosen professions, justify the use of alternative criteria in the selection process. This is not to say that affirmative action programs are the answer to the dilemma of how to identify the potential to contribute among college applicants. However, students admitted under alternative admissions programs tend to be evaluated, at least qualitatively, on a wider range of criteria and some effort is typically made to assess their future potential to make greater societal contributions.

Student Body Needs

The previous selection criteria focused on society as the ultimate beneficiary of the selection process. However, a second potential beneficiary is the environment of the admitting educational institution itself. The "environmental" or institutional perspective assumes that every institution has the right to admit certain students, not because they are the best candidates, but because they best fit the needs of the institutional environment. In other words, one valid goal of the selection process is to construct a student body that better serves the ability of the institution to fulfill its self-determined mission and goals.

In its purest sense, the environmental perspective might be described as building a class. Although the term is often used in reference to the general task

of any admissions office, it is most appropriately used for those operations whose decision making places a high priority on bringing together an incoming class to meet specific institutional needs. This calls for the admissions staff to identify and collect information about the important characteristics—at least those defined by the institution as important—of each prospect and applicant so that they may be considered when it comes time to decide admission.

The admissions office typically compiles a general directory of socioeconomic information, gender, address, racial/ethnic orientation, religion, etc. In addition, the college or university may want to know about academic and career interests, any relationships to the institution (e.g., legacies), recognition of outstanding achievements, indications of special talents (athletic and otherwise), and frequently the potential for major contributions to the institution's endowment. Much of the information is captured on the student's application form and on forms completed by the secondary school. Additional information may also be provided through references and contacts between the admissions office and other institutional staff, institutional benefactors, or the candidates themselves.

The real essence of the student-body-needs model is in determining how institutional needs are met and the degree to which such needs influence the admission decisions. For some institutions, an environmental perspective may simply mean adhering to legislative or institutionally imposed mandates. For example, a public university may be required to enroll a certain percentage of its class from within the political entity that supports it. An institution with strong religious ties may seek its enrollment predominantly from among members of the faith. Some colleges and universities may have as their mission to create a specific type of learning community; for example, a liberal arts institution may seek to admit students into certain curricula in order to maintain a healthy disciplinary balance. A "national" institution may admit students from certain locales in order to maintain a broad geographic representation. It can also mean paying particular attention to students representing constituencies that are important to the institution—alumni or prominent benefactors for example. Often, it will mean making some decisions based on gaps in the current student body—an institution might need two additional high-caliber cellists for the orchestra or a goalie for the hockey team!

This student-body-needs model generally assumes that all candidates meet at least a modest academic eligibility standard. However, within any targeted group, academic quality, preparation, and achievement will often be a secondary consideration, given certain minimal qualifications. An institution will usually strive to admit the students with the highest academic qualifications within the bounds established. However, it is quite possible that, in some cases, they may make a decision simply to admit a particular student because he or she clearly satisfies an institutional need, perhaps ignoring all or some of the criteria being applied to other candidates.

Ability to Pay

The selection criteria that derive from the "fiduciary" perspective might well have been included in the environmental section, as a general student body need. However, we would argue that the fiduciary perspective warrants special consideration. Perhaps no issue is more contentious than the role of a student's financial resources in the selection process. For many the answer is simple: a student's ability to pay for his or her education should have no role whatsoever in the decision as to whether he or she is admitted. On purely ethical grounds, it is likely that the majority of admissions professionals would agree, in principle, with this statement. Certainly this was true in Toronto. However, as several of the participants also noted, the realities of the modern world preclude, for some institutions, the luxury of taking the ethical high ground for all of their prospective students. It has almost become a truism that the higher education cost index runs at about double the rate of the consumer price index.[9] Stated another way, for more than a decade now, the cost of attending college has been growing at a much faster rate than personal income. The result is that more and more families are finding themselves unable to bear the full cost of a college education. Need-based financial aid, once mainly a concern of those with lower incomes, has now become a necessity for families that most would consider comfortably middle class. At the same time, public support for higher education, through state and federal programs, has continued to fall further behind the total financial need of the college-going population. The result is that colleges themselves have borne most of the financial burden to fill the gap between rising educational costs and dwindling family and government resources.

It would not be an understatement to say that the situation has become critical. Families and colleges alike are approaching the limit of what they can contribute. It is not unusual for the total financial aid budget for an institution to approach, or even exceed, 50 percent of the total tuition revenue. Likewise, more and more families have been stretched to their limits, not only with direct family contributions, but also with increasingly large loan burdens that the student must pay off after graduation. For example, the average loan amount incurred by needy graduates from institutions ranked in the 1998 *U.S. News Top 25* was $15,729. Recently, several universities, most with large endowments, have announced more liberal need-based financial aid policies. This will certainly be helpful to some families and will bestow a certain competitive advantage to those institutions that can afford to increase their financial aid budget. However, for every institution with the resources to increase financial aid, there are two or three that have already reached their budgetary limits. These institutions face very difficult choices in the near future. They can continue to increase their budget for need-based aid, often to the detriment of the institution's academic quality stability, or they can find some means to reduce the aggregate financial need of their students.

There are several ways that an institution may reduce the overall need of its enrolled students. Many of these are designed indirectly to reduce the number of very needy students who eventually enroll. Two examples of this approach are financial aid leveraging, where the quality of the financial aid package is manipulated in order to be more attractive to certain types of students, and target marketing, where the recruitment process is modified towards a similar goal. We will not discuss these indirect approaches in detail here. A more direct approach is simply to deny admission to some students based, in part, on their financial need. A seemingly gentler approach, but one that often attains identical results, is to admit students without regard to need, but then to reduce the level of institutional aid offered to certain less attractive or more needy students. In either case, the student's financial situation is injected into the admission process.

The ability to pay will undoubtedly continue to play a role in student selection for some institutions. What is unclear to the public, and perhaps even to the admissions profession, is the responsibility an institution incurs when making such a decision. What ethical standards apply? How does ability to pay fit into a comprehensive admissions policy? What are the personal and educational consequences of admitting a person but then denying him or her financial aid? Unfortunately, while it falls to admissions professionals to implement such institutional policies, they are not always fully represented in the institutional decision-making process.

MODEL INTEGRATION

The philosophical perspectives and the associated selection criteria described in this paper are theoretical in nature and intended to highlight the basis on which admissions decisions are often made. They do not necessarily describe functioning models of admissions offices and very few, if any, admissions offices operate on a pure implementation of any one perspective. In reality, most offices employ more than one approach, either during different stages of the overall admission cycle or for different segments of the applicant population.

In most cases, the use of multiple decision-making processes tends to be implicit, with little in the way of formal guidelines or published descriptions. This lack of clarity no doubt contributes to the confusion and frustration expressed by those outside the admissions profession when they attempt to determine why certain students are admitted while others are denied. As an example, a particular college might code any student with high school GPA of 3.5 or above and an SAT total score of 1300 or above as an automatic admit with little or no review of the application folder. The admissions office might then carefully review the folders of applicants with a high school GPA between 3.0 and 3.5 or an SAT score of 1000 to 1300, emphasizing the applicant's personal qualities in the selection process. For students with a high school GPA below 3.0 and an SAT score below 1000, the admissions office might focus

more on the circumstances of the students' precollegiate education and opportunities. The intent might be to identify applicants who have successfully overcome educational and social disadvantages on the road to establishing their "eligibility" for admittance. Finally, a small set of students might be admitted from the group of applicants with marginal academic qualifications because they meet certain specific student body needs, such as athletic ability or being designated as "highly desirable" by the development office.

In effect, this hypothetical institution would implicitly be segmenting its applicant population into three groups based on academic qualifications. The decision whether to admit students with the high academic qualifications would be made using "eligibility" type criteria; the medium qualification groups would be admitted based on "character" type criteria; and the group with marginal qualifications would be selected using either "mobilization"- or "environmental"-type criteria.

The actual admissions model used by a particular college or university could take many different forms, ranging from very simple to very complex. Pure eligibility-based models are the simplest models and the least confusing, if not the least controversial. Alternative models may utilize multistage processing, where different decision-making processes are applied at different stages of the admissions cycle. For example, an institution may utilize one type of decision-making process at early decision, another at regular decision, and yet another process for making admissions decisions for students accepted off a wait-list. Indeed, it is becoming more and more common for colleges and universities to be "need-blind" through early decision and regular decision, but then to consider the applicant's financial resources when deciding whom to admit from the wait-list.

In addition to multisegment and multistage decision making, many institutions are likely to use multifactor decision making. In multifactor decision making, an applicant is evaluated on multiple simultaneously applied criteria, each of which may be assigned different weights in the decision-making model. The evaluation criteria considered in a multifactor process are not simply different ways of measuring a single conceptual area, such as considering both SAT scores and high school GPA when evaluating academic quality. Rather, in a multifactor decision-making process, an attempt is made to consider qualitatively different conceptual factors, such as potential to contribute and potential to benefit simultaneously by operationalizing each factor with measurable criteria. The measurable criteria are then assigned weights relative to each other to arrive at a global evaluation of the candidate.

One way to capture the essence of a functioning admissions decision-making model is with a hierarchical tree diagram. In such models, the decision path is identified by the tree structure while the width and length of the branch capture the weighting of the various selection criteria. A model of moderate complexity is depicted in Figure 1. This model attempts to segment the

applicant population and then apply different selection processes to the various population segments. In this case, absolute eligibility is heavily weighted: everyone must meet certain minimum academic criteria in order to be considered for admissions, as illustrated by the main trunk. However, eligibility factors alone are typically insufficient to gain admissions, as illustrated by the very small performance and progression branches. Once basic eligibility is established, the applicant's academic qualifications (or "quality") become the major segmenting criteria. The population is divided into three groups: those with very high academic qualifications, those with moderate qualifications, and those with relatively low academic qualifications.

The decision making for students who have relatively high academic qualifications proceeds along a branch that has only minor considerations as to the students' capacity to benefit, contribute, or meet other performance criteria or character. Most students on this branch will be admitted, regardless of these additional considerations, which come into play only as negative factors. Nonetheless, some applicants with high academic qualifications may be denied based on additional factors such as character issues or a striking failure to take advantage of previous academic opportunities.

The decision making for students with moderate academic qualifications takes a somewhat different path. These students are further evaluated,

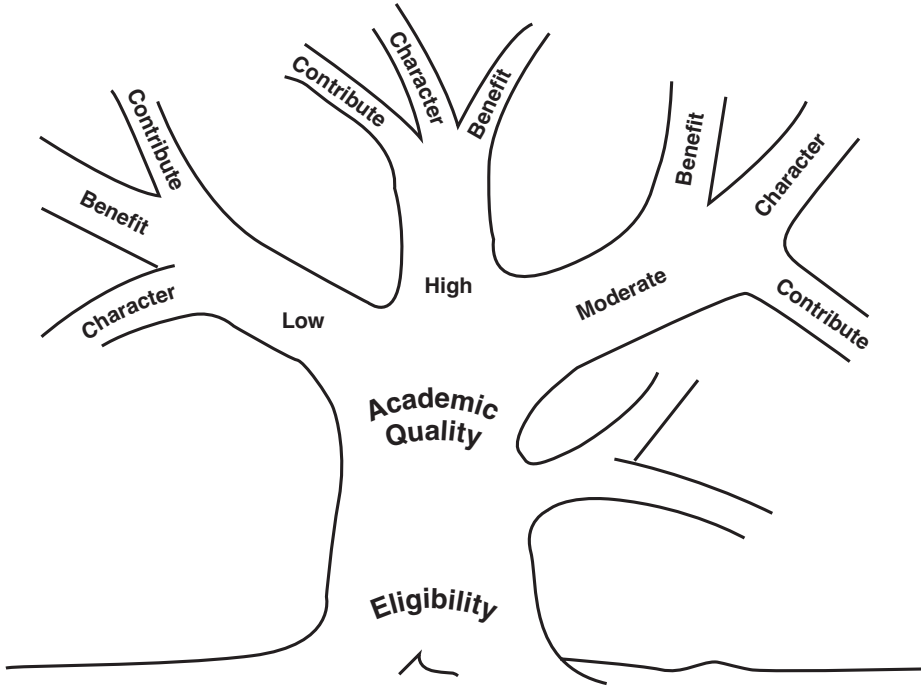

Figure 1. An admissions model of moderate complexity.

primarily on their personal qualities and achievements, but also to some degree on their potential to benefit, and to a lesser degree on their ability to contribute. These secondary factors tend to carry more weight for moderate quality applicants than they do for the high quality group. Most of these students will likely be admitted, but some will not.

Finally, students who have relatively low academic abilities are reviewed to determine which, if any, should be offered admission. The assumption is that these students will not be admitted. However, a small percentage will be offered admission. Some will be admitted because they demonstrate a great potential to benefit from the current educational opportunity; perhaps they have risen from a very limited environment and have demonstrated a clear tendency to make the most of the limited educational opportunities that they have had. A few additional students from this group may be offered admission because of strong support from the athletic department or development office.

The diagram in Figure 1 is an attempt to convey the mechanics of a prototypic segmentation-based, decision-making process. The diagram is a qualitative way of conceptualizing how various selection factors may interact in a functioning admissions model. Quantitatively, it is incomplete because it does not actually specify all selection criteria considered and their relative importance. For example, is ability to pay part of the selection process within the ability to contribute branch? This is not clear from the figure. However, such a model might be refined to provide a complete quantitative representation of the admissions model at a particular institution. This would require that the general categories of consideration, including potential to contribute and potential to benefit, be further refined into specific evaluative criteria. In addition, the relative weighting of each evaluation criterion would need to be specified (perhaps as the leaves on the tree). In this way, a tree diagram such as that depicted in Figure 1 could be used to represent different decision-making models at any desired level of abstraction or concreteness—from purely qualitative guides that reveal only how the evaluation process proceeds, to fully specified quantitative models in which a desirability score is assigned to each applicant. Likewise, such a tree diagram could be adapted to depict the use of multiple simultaneous criteria, either at a qualitative level or at a fully specified quantitative level.

The use of multiple decision-making branches within a single admissions operation is both widespread and functionally effective. However, as noted above, actual real world models are likely to become substantially more complex than the simple model depicted in Figure 1. The situation is made even more challenging by the growing requirement that an institution's admissions model not only be described, but also empirically defended. Furthermore, different implementations of tree-based, decision-making models demand different approaches to establishing their validity, fairness, and efficacy. The problem is even more striking when you consider how one might communicate a model to the general public in which different processes using different weighting of mul-

tiple factors are applied at different times to different groups of students. Yet that is exactly what is being demanded of the admissions profession.

NO "FINAL" CONCLUSION

The intent of this paper has been to suggest one particular perspective on the landscape of the admissions decision-making process—a perspective that emerged through hours of discussion and from the collective thought of about 50 admissions practitioners from selective institutions. The proposed taxonomy, as it currently stands, is useful primarily for organizing future discussions about institutional values and how those values should be projected on admissions policies and practices. The ideas discussed in this paper should not be taken as proscriptive or judgmental and certainly not final. Consequently, there is no appropriate "conclusion." Indeed, the only legitimate conclusion is this: the "best" admissions model must be written by each unique institution and must include careful consideration of the institution's mission, resources, and culture.

Further, any conclusion would be premature before a comprehensive research agenda is undertaken. It is not enough to fully describe the complexities of institutional admissions models. In today's world, any decision-making model that is employed must also be empirically defended. The importance of basing admissions decision making in a solid empirical framework has grown tremendously over the past few years as courts, legislatures, representatives of unsuccessful applicants, and the general public have called upon colleges to defend each and every decision-making strategy they employ. Perhaps the most pressing next step is to lay the groundwork for future decision models by undertaking a comprehensive review of the selection criteria thought to be important when identifying a successful candidate. Of course, one must first describe what is meant by the term "successful student," and a primary emphasis will be placed on the relationship between the various selection factors and multiple desired outcomes.

In addition to a research agenda, several other important topics in need of exploration were identified in Toronto and Vancouver. At the top of this list was the need for improved communications with higher education's many different publics: students and families, school counselors, the media, legislators, governing boards, and other policymakers. Prompted in part by concern over the changing composition of enrolling classes in states where affirmative action is prohibited, there are now numerous working groups of university administrators and faculty, lawyers, and others seeking different or better ways to "do" admissions. This document should help advance those discussions from the perspective of current admissions practices. While the taxonomy, as outlined in this document, is unlikely to be accessible to many of these audiences, it might well be "translated" for the general public. We may be

adept at communicating to prospective students as individual practitioners, but we have far to go in communicating as a profession to the general public. Finally, it is hoped that the taxonomy outlined here might also be useful for elucidating the implications of policy changes such as tuition increases (or reductions), modifications in basic eligibility requirements, and enrollment caps or other capacity changes. Such structural changes do not occur in a vacuum and when viewed in the context of a complex decision-making process, they have significant implications for educational outcomes.

In the end this paper is but a first attempt at documenting what is, and a first step on the road to defining what can and should be. Although impossible to predict, it is likely that admissions as it has been practiced during the last years of the twentieth century will become more pragmatic and more open than has been the case in the past. We are moving away from a blind "trust us" mentality to an atmosphere of public interest and inquiry. The challenge will be to ensure that the broader individual, institutional, and public interests identified in this paper continue to be served as the admissions process becomes more public and politicized. Bok and Bowen (1998, p. 277) captured the challenge when they said:

> *…what admissions officers must decide is which set of applicants, considered individually and collectively, will take the fullest advantage of what the college has to offer, contribute the most to the educational process in college, and be the most successful in using what they have learned for the benefit of the larger society.*

APPENDIX

Admission Decision-Making Models
Classification Scheme

Philosophical Perspective	Entitlement	Open access	Meritocracy	Character	Enhancement	Mobilization	Investment	Environmental	Fiduciary
Family Group	Eligibility		Capacity to Perform		Potential to Benefit		Potential to Contribute		
Eligibility Requirement	Credential Based	Performance Based	Performance Based Prerequisite	Performance Based Prerequisite	Performance Based Prerequisite	Performance Based Prerequisite	Performance Based Prerequisite	Performance Based Prerequisite	Performance Based Prerequisite
Selection Process	Progression Guarantee	Performance Guarantee	Competitive Selection	Competitive Selection	Competitive Selection	Competitive Selection	Competitive Selection	Competitive Selection	Competitive Selection
Primary Evaluation Criteria	N/A	N/A	Academic Quality	Personal Qualities	Potential to Benefit	Overcoming Educational Adversity	Potential to Contribute	Consistency with Student-Body Needs	Ability to Pay
Additional Evaluation Criteria 3			College Specific	College Specific	College Specific	College Specific	College Specific	College Specific	College Specific
Additional Evaluation Criteria 4			College Specific	College Specific	College Specific	College Specific	College Specific	College Specific	College Specific
Additional Evaluation Criteria 5			College Specific	College Specific	College Specific	College Specific	College Specific	College Specific	College Specific
Additional Evaluation Criteria 6			College Specific	College Specific	College Specific	College Specific	College Specific	College Specific	College Specific

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